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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Yoshihiro KONO

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Group Art Unit: 2873

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Examiner: Harrington, A.

For: WORKING METHOD OF DIE FOR USE FOR FRESNEL LENS, CUTTING TOOL FOR USE WITH THE WORKING METHOD, DIE WORKED THROUGH EXECUTION OF THE WORKING METHOD, AND FRESNEL LENS WORKED FROM THE DIE

AMENDED ABSTRACT

A2
~~Disclosed is a working method of a die which can prevent the decrease in the service life of a cutting tool due to the chip off of a tip thereof and add an additional value to the Fresnel lens. The working A method is the one for working a die for use for with a Fresnel lens, the method being intended to work in an original die plate having a Fresnel molding groove having with wall surfaces corresponding to a lens surface and a non-lens surface of the Fresnel lens; wherein there is used a. A cutting tool wherein having one piece of edge line continuing to a blade end is constructed as a cutting edge; and the . The blade end has formed therein a notched portion which connects the one piece of edge line and another piece of edge line. Thereby, while a relative rotating movement around a center line of the die is being made between the cutting tool and the original die plate, the cutting tool goes on to be is fed into the original die plate with the cutting edge being used as the leading blade, so that the wall surface corresponding to the non-lens surface of the Fresnel molding groove is gradually cut from an upper end thereof by the notched portion. The wall surface corresponding to the non-lens surface has formed therein a concavities/convexities configuration of cutting trace through the operation of the notched portion.~~